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**D3216-1**  
**Job Sheet 168513**



Part No: D3216-1

Job Qty: 25 ea

Part Name: Fitting



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/15/17

Job Tracking No:

Due Date: 11/22/17

Created By: Mario Poulin

Type: SOLD

Description:

Note: DWG REV A IPP: A 03.10.28 New Issue KJ/RF IPP Rev:B Now on Waterjet 06-07-03 JLM

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty    | Start Date | Due Date | Standard  | Workcenter/Supplier |                                 | Sign-off    |
|-------|--------------------|--------|------------|----------|-----------|---------------------|---------------------------------|-------------|
|       |                    |        |            |          | Setup hrs | Run Hrs             | Workcenter / Supplier Lead Time |             |
| 90    | Start up Operation | 25 Ea  |            | 11/21/17 | 0.00      | 0.00                | Start Up Waterjet               | 81          |
| 100   | Waterjet           | 25 pcs |            | 11/21/17 | 0.00      | 1.28                | Waterjet1                       | 38          |
| 120   | QC                 | 25 pcs |            | 11/21/17 | 0.00      | 0.00                | QC8                             | 38          |
| 130   | Small Fab          | 25 pcs |            | 11/22/17 | 0.00      | 4.02                | Small Fab                       | 17-11-21-24 |
| 140   | QC                 | 25 pcs |            | 11/22/17 | 0.00      | 0.00                | QC5                             | 38          |
| 150   | Packaging          | 25 pcs |            | 11/22/17 | 0.00      | 0.00                | Packaging3                      | 38          |
| 160   | QC21-SA            | 25 Ea  |            | 11/22/17 | 0.00      | 0.00                | QC21                            | 38          |

Part Op 100 - 1-Cut as per Dwg D3216

Descriptions: 130 - Tumble until parts have a polished finish.

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated | Std Qty |
|-----------------------|----------------|----------|-----------|-----------|---------|
| 90-Start up Operation | M304S11GA      | 1        | 135       | 0         | 0       |

### Part Specifications

| Spec No | Description | Target/Tolerance        | Limits         | Type | Special Comments |
|---------|-------------|-------------------------|----------------|------|------------------|
| 1       | Fitting     | 2.600inches $\pm$ 0.010 | 2.610<br>2.590 |      |                  |
| 2       | Fitting     | 2.010inches $\pm$ 0.010 | 2.020<br>2.000 |      |                  |
| 3       | Fitting     | 0.295inches $\pm$ 0.010 | 0.305<br>0.285 |      |                  |
| 4       | Fitting     | 1.548inches $\pm$ 0.010 | 1.558<br>1.538 |      |                  |
| 5       | Fitting     | 1.004inches $\pm$ 0.010 | 1.014<br>0.994 |      |                  |
| 6       | Fitting     | 0.295inches $\pm$ 0.010 | 0.305<br>0.285 |      |                  |
| 7       | Fitting     | 0.250inches $\pm$ 0.010 | 0.260<br>0.240 |      |                  |
| 8       | Fitting     | 0.125inches $\pm$ 0.010 | 0.135<br>0.115 |      |                  |

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                               |  |                                        |                                     |                                              |                                      |  |  |
|--------------------------------------------------------------|-----------------------------------------------|--|----------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------|--|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b>                            |  | <b>AGAINST DEPARTMENT/PROCESS</b>      |                                     |                                              |                                      |  |  |
|                                                              | Rework <input type="checkbox"/>               |  | Skid-tube <input type="checkbox"/>     | Cross tube <input type="checkbox"/> | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/> |  |  |
|                                                              | Scrap <input type="checkbox"/>                |  | Machining <input type="checkbox"/>     | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |  |  |
|                                                              | Use-as-is <input type="checkbox"/>            |  | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>       |  |  |
|                                                              | Suspected Unapproved <input type="checkbox"/> |  | Large Fab <input type="checkbox"/>     | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>            |                                      |  |  |

|                                  |               |                       |                       |
|----------------------------------|---------------|-----------------------|-----------------------|
| Date : _____                     | Step #: _____ | QTY Effective : _____ | MRB (QSI042) Approval |
| Description Work Order Deviation |               | Disposition           |                       |

|                                                                                       |  |                                                                                  |                                                                                      |
|---------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Job No: 168513<br>Mfg Date: 11/17/17<br><b>Start up Operation</b><br><b>D3216 - 1</b> |  | Change No: _____<br>Operation: _____<br>Revision: _____<br><b>PART NO: _____</b> | ad hand / Supervisor<br>Approval Verification<br><br>QC / QA Coordinator<br>Approval |
|---------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                            |                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Root Cause</b><br>Environment <input type="checkbox"/> No Re-verification <input type="checkbox"/><br>Design <input type="checkbox"/> Operator <input type="checkbox"/><br>Doc/Data <input type="checkbox"/> Offset/Setup <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/> Supplier <input type="checkbox"/><br>Handling/Pre <input type="checkbox"/> Training <input type="checkbox"/><br>Material <input type="checkbox"/> Use for Testing <input type="checkbox"/><br>Internal Transport <input type="checkbox"/> Poor Information <input type="checkbox"/><br>Tribal Knowledge <input type="checkbox"/> Rushing <input type="checkbox"/><br>LOA <input type="checkbox"/> Product Improvement <input type="checkbox"/><br>Substation <input type="checkbox"/> Process Improvement <input type="checkbox"/><br>Past Expiry Date <input type="checkbox"/> Manufacturing Process <input type="checkbox"/><br>Misidentified <input type="checkbox"/> Past Due <input type="checkbox"/> |  | Press <input type="checkbox"/><br>Bend <input type="checkbox"/><br>Cent <input type="checkbox"/><br>Crack <input type="checkbox"/><br>Crimp <input type="checkbox"/><br>Cuffs <input type="checkbox"/><br>Crust <input type="checkbox"/><br>Heat Treat <input type="checkbox"/><br>Wave/Twist in Tube <input type="checkbox"/><br>Marks/Chatter <input type="checkbox"/> | Cut Too Short <input type="checkbox"/><br>Instructions Incomplete/Unclear <input type="checkbox"/><br>Drill Holes <input type="checkbox"/> | Misaligned/off center <input type="checkbox"/><br>Fit/Function <input type="checkbox"/><br>Mislabeled <input type="checkbox"/> | Positioned Wrong <input type="checkbox"/><br>Outside Dimensions <input type="checkbox"/><br>Over/Under tolerance <input type="checkbox"/><br>Part Incorrect <input type="checkbox"/><br>Part Lost/Missing <input type="checkbox"/><br>Part Moved <input type="checkbox"/><br>Drawing <input type="checkbox"/><br>Finish <input type="checkbox"/><br>Misread <input type="checkbox"/><br>Turning Sequence <input type="checkbox"/> |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                            |                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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**DART**  
 AEROSPACE  
**S010874**



|                                            |  |                     |         |
|--------------------------------------------|--|---------------------|---------|
| <b>DART AEROSPACE LTD</b>                  |  | <b>Work Order:</b>  | 168513  |
| <b>Description:</b> Fitting                |  | <b>Part Number:</b> | D3216-1 |
| <b>Inspection Dwg:</b> D3216 <b>Rev:</b> A |  | <b>Page 1 of 1</b>  |         |

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article      ☐ Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|-----------|------------------|--------|--------|----------------------|----------|
| 2.600             | +/-0.010  | 2,605            | 1      |        | UDC-02               |          |
| 2.010             | +/-0.010  | 2,012            | 1      |        |                      |          |
| 0.295             | +/-0.010  | 0,294            | 1      |        |                      |          |
| 1.548             | +/-0.010  | 1,549            | 1      |        |                      |          |
| 1.004             | +/-0.010  | 1,005            | 1      |        |                      |          |
| 0.295             | +/-0.010  | 0,294            | 1      |        |                      |          |
| 0.250             | +/-0.010  | 0,251            | 1      |        |                      |          |
| 0.125             | +/-0.010  | 0,117            | 1      |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
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|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |

|                     |          |                    |             |                            |     |
|---------------------|----------|--------------------|-------------|----------------------------|-----|
| <b>Measured by:</b> | SC       | <b>Audited by:</b> | 38          | <b>Prototype Approval:</b> | N/A |
| <b>Date:</b>        | 17/11/16 | <b>Date:</b>       | NOV 17 2017 | <b>Date:</b>               | N/A |

| Rev | Date     | Change    | Revised by | Approved |
|-----|----------|-----------|------------|----------|
| A   | 07.11.23 | New Issue | KJ/EC/DD   |          |